

REMARKS

I. Status of the Application

Claims 1-20 are pending in this application. In the June 2, 2005 office action, the Examiner:

- A. Required correction of an informality at page 14, line 10 of the disclosure;
- B. Rejected claims 1-20 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,446,677 to Jensen et al. (hereinafter "Jensen").

In this response, applicants have amended the specification to address the identified informality, as well as others. No new matter is added by way of the amendments.

Applicants have amended claims 1, 3, 4, 8 and 11 to further clarify the claimed subject matter, and have canceled claim 2 without prejudice. Applicants have also added new claim 21.

Applicants respectfully traverse the rejections of claims 1-20 and request reconsideration in view of the foregoing amendments and the following remarks.

II. The Anticipation Rejection of the Claims Should be Withdrawn

Claims 1-20 stand rejected as allegedly being anticipated by Jensen. For reasons that will be discussed below in detail, it is respectfully submitted that the anticipation rejection of claims 1-20 should be withdrawn.

A. Claim 1

Claim 1, as amended, is directed to a method for automatically testing in parallel multiple variable air volume (VAV) boxes coupled to the same floor level network. The method includes the step of communicating with a floor level network from a building level network. The method also includes sending at least one test parameter associated with a first test procedure to a first VAV box coupled to the floor level network. The first VAV box has a first configuration, for example, a set of structures or a set of capabilities or functions that may be performed. The method also include sending at least one test parameter associated with a second test procedure to a second VAV box coupled to the floor level network so that the first and second VAV boxes are responding to a test parameter associated with different test procedures at approximately the same time. The second VAV box has a second configuration, wherein the first test procedure is inapplicable to the second configuration. In other words, the first test performed on the first VAV box is not applicable to the second VAV box because the second VAV box is configured differently.

By way of example, the application as filed at page 18, lines 3-15 describes variations on tests performed based on whether the VAV has a discharge temperature sensor.

Claim 2 as originally filed included similar limitations, but did not recite that different test procedures related to the configuration of the devices being tested.

B. Jensen

Jensen is directed to a diagnostic system for use in an environment control network. The system includes a work station that is able to test at least some VAV boxes simultaneously, and is further operable to cause a first set of dampers to close and a second

set of dampers to open. (See, e.g., Jensen at col. 7, line 63 to col. 8, line 17). The tests consist of performing various actions with the VAV boxes and then measuring the air flow and/or the time it takes to move a damper. (Col. 8, line 35 to col. 11).

1. **Jensen Does Not Teach Sending Different
Parameters Based on VAV Box Configuration**

Jensen does not teach or suggest “sending at least one test parameter associated with a first test procedure to a first VAV box . . . having a first configuration; and sending at least one test parameter associated with a second test procedure to a second VAV box . . . so that the first and second VAV boxes are responding to a test parameter associated with different test procedures at approximately the same time, the second VAV box having a second configuration, wherein the first test procedure is inapplicable to the second configuration” as recited in amended claim 1. In other words, Jensen does not teach that different tests may be performed at about the same time using different parameters, the different tests related to the configurations of the VAV boxes being tested.

Jensen only appears to teach application of tests for uniform devices. While Jensen does teach that tests may be performed where, at the same time, half of the VAV boxes are closed and the other half are opened, this does not satisfy claim 1. Even if “opening” and “closing” the boxes constitutes different tests, those tests are not different *because* of the configuration of the boxes. Instead, Jensen teaches application of different tests to avoid having all boxes opened or closed at the same time, which can result in damage. (Jensen at col. 8, lines 64-67). In other words, even if “opening” and “closing” are different tests, those “tests” are *not* applied based on whether the “test” is applicable to a particular VAV box.

Indeed, Jensen appears to presume that all of the boxes are identical, or at least chooses tests that can be performed by multiple types or configurations of boxes.

Regardless, Jensen clearly does not teach performing different tests on boxes of different configurations at the same time, wherein the different tests correspond to the different configurations.

Accordingly, it is respectfully submitted that Jensen fails to teach each and every element of the invention of claim 1. It is therefore respectfully submitted that the anticipation rejection of claim 1 should be withdrawn.

C. Claims 3-7

Claims 3-7 also stand rejected as allegedly being anticipated by Jensen. Claims 3-7 depend from and incorporate all of the limitations of claim 1. Accordingly, for at least the same reasons as those set forth above in connection with claim 1, it is respectfully submitted that the rejection of claims 3-7 over Jensen should be withdrawn.

D. Claim 8

Claim 8 also stands rejected as allegedly being anticipated by Jensen. Claim 8 has been amended to incorporate the limitations of original claim 1, from which claim 8 originally depended. Accordingly, claim 8 is substantially identical in scope to claim 8 as filed.

Claim 8 is directed to a method for automatically testing in parallel multiple variable air volume (VAV) boxes coupled to the same floor level network. The method includes communicating with a floor level network from a building level network. The method further includes sending at least one test parameter to a plurality of variable air volume (VAV) boxes

coupled to the floor level network so that at least two VAV boxes are responding to the one test parameter at approximately the same time. The method also includes sending at least one test parameter from a calibration procedure, an auto zero module procedure, a damper operation and airflow procedure, a heating function procedure, and a control function procedure to at least one of the VAV boxes coupled to the floor level network.

1. **Jensen Does Not Disclose or Suggest a Test
Parameter from a Heating Function Procedure**

Jensen fails to disclose or suggest, among other things, “sending at least one test parameter from . . . a heating function procedure”, as recited in claim 8. Jensen teaches tests that relate purely to flow and damper movement, and not to any temperature related operations, much less a heating function. (See generally Jensen from col. 8 to col. 11). In particular, Jensen teaches implementation of a “flat response test”, a “starved box test”, an “oversized box test”, an “area out of bounds test”, a “CFM multiplier (K) out of bounds”, an “excessive damper hysteresis test”, and a “damper stroke out of bounds test”. A review of each of these tests reveals that none of them measure temperature in any way, and therefore cannot possibly be construed as a “heating function procedure”, as claimed. (*Id.*)

In the rejection of claim 8, the Examiner cited cols. 8-11 as teaching the recited list of testing operations of claim 8. (June 2, 2005 office action at p.4). As discussed above, however, none of the tests in those columns teach or suggest anything that remote relates to a heating operation or a heating function. Indeed, because Jensen fails to teach any test that takes into consideration a temperature measurement, or the operation of a device that radiates heat (or cool), Jensen cannot teach a heating function procedure.

In the rejection of a related claim 10, the Examiner cites col. 1, lines 42-46 of Jensen as teaching using a room temperature or discharge temperature as the parameter for a heating function procedure. (June 2, 2005 office action at p.4) Applicants respectfully disagree. The cited portion of Jensen teaches that a controller of VAV receives air flow and temperature information and generates control of the VAV based thereon. That is the normal operation of a VAV box. Thus, the cited portion of Jensen (the “background”) teaches *normal* operation of the VAV controller, and *not* test operations. Indeed, the tests of cols. 8-11 of Jensen naturally requires that temperature based control is *overridden* to allow for testing of the damper function (e.g. opening 100%, closing 100% is performed regardless of temperature). To this end, it is noted that none of the test functions use temperature information, as discussed above.

Accordingly, it is respectfully submitted that the Examiner has mischaracterized Jensen to the extent the Examiner alleges that Jensen teaches providing a test parameter for a test of a heating control function. As a consequence, the rejection of claim 8 over Jensen is in error and should be withdrawn.

E. Claims 9 and 10

Claims 9 and 10 also stand rejected as allegedly being anticipated by Jensen. Claims 9 and 10 depend from and incorporate all of the limitations of claim 8. Accordingly, for at least the same reasons as those set forth above in connection with claim 8, it is respectfully submitted that the rejection of claims 9 and 10 over Jensen should be withdrawn.

F. Claim 11

Claim 11 also stands rejected as anticipated by Jensen. Claim 11 has been amended to incorporate the limitation “the test manager [is] operable to send different test parameters to different VAV boxes based on different design configurations of the different VAV boxes”. As discussed above in connection with claim 1, Jensen does not teach sending different test parameters to different VAV boxes that is in *any* way dependent on the design configurations of the different VAV boxes. In Jensen, nothing is varied as a function of the design configuration of the VAV box.

Accordingly, for at least this reason, Jensen fails to teach or suggest each and every element of claim 11. For at least this reason, it is respectfully submitted that the rejection of claim 11 is in error and should be withdrawn.

G. Claims 12-20

Claims 12-20 also stand rejected as allegedly being anticipated by Jensen. Claims 12-20 depend from and incorporate all of the limitations of claim 11. Accordingly, for at least the same reasons as those set forth above in connection with claim 11, it is respectfully submitted that the rejection of claims 12-20 over Jensen should be withdrawn.

H. New Claim 21

New claim 21 depends from claim 1 is allowable for at least the same reasons as claim 1. In addition, claim 21 includes a limitation directed to providing a parameter for a heating function test. As discussed above in connection with claim 8, Jensen fails to teach such

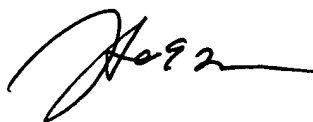
providing such a parameter. Accordingly, claim 21 is allowable for reasons independent of those set forth above in connection with claim 1.

III. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicants have made a patentable contribution to the art. Favorable reconsideration and allowance of this application is, therefore, respectfully requested.

Respectfully Submitted,

MAGINOT, MOORE & BECK

A handwritten signature in black ink, appearing to read 'H. Moore', with a stylized flourish extending to the right.

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